

Alice M.Minnick
Northern Indiana Crematory Corporation
P.O.Box 111000,
Fort Wayne, Indiana 46855

Re: Registered Construction and Operation Status,
003-13654-00184

Dear Alice M.Minnick:

The application from Northern Indiana Crematory Corporation, received on December 20, 2000, has been reviewed. Based on the data submitted and the provisions in 326 IAC 2-5.1, it has been determined that the following animal crematory *operation*, to be located at 222 N.Thomas Road, Fort Wayne, IN 46808, Indiana, is classified as registered:

- (a) one (1) Therm-Tec G-50-P animal crematory unit, with a maximum capacity of 625 pounds per hour, consisting of primary and secondary chambers, exhausting to stack 1.

The following conditions shall be applicable:

1. Pursuant to 326 IAC 5-1-2 (Opacity Limitations) except as provided in 326 IAC 5-1-3 (Temporary Exemptions), opacity shall meet the following:
 - (a) Opacity shall not exceed an average of forty percent (40%) in any one (1) six (6) minute averaging period as determined in 326 IAC 5-1-4.
 - (b) Opacity shall not exceed sixty percent (60%) for more than a cumulative total of 15 minutes (60 readings) in a 6-hour period as measured according to 40 CFR 60, Appendix A, Method 9 or fifteen (15) one (1) minute nonoverlapping integrated averages for a continuous opacity monitor in a six (6) hour period.
2. Pursuant to 326 IAC 4-2-2 (Incinerators: Requirements), All incinerators shall:
 - I. consist of primary and secondary chambers or the equivalent;
 - II. be equipped with a primary burner unless burning wood products;
 - III. comply with 326 IAC 5-1 and 326 IAC 2;
 - IV. be maintained properly as specified by the manufacturer and approved by the commissioner;
 - V. be operated according to the manufacturer's recommendations and only burn waste approved by the commissioner;
 - VI. comply with other state and/or local rules or ordinances regarding installation and operation of incinerators;
 - VII. be operated so that emissions of hazardous material including, but not limited to, viable pathogenic bacteria, dangerous chemicals or gases, or noxious odors are prevented;
 - VIII. not emit particulate matter in excess of three-tenths (0.3) pounds of particulate matter per one thousand (1,000) pounds of dry exhaust gas at standard conditions corrected to fifty percent (50%) excess air; and
 - IX. not create a nuisance or a fire hazard.

This registration is the first air approval issued to this source. The source may operate according

to 326 IAC 2-5.5.

An authorized individual shall provide an annual notice to the Office of Air Quality that the source is in operation and in compliance with this registration pursuant to 326 IAC 2-5.1-2(f)(3). The annual notice shall be submitted to:

**Compliance Data Section
Office of Air Quality
100 North Senate Avenue
P.O. Box 6015
Indianapolis, IN 46206-6015**

no later than March 1 of each year, with the annual notice being submitted in the format attached.

An application or notification shall be submitted in accordance with 326 IAC 2 to the Office of Air Quality (OAQ) if the source proposes to construct new emission units, modify existing emission units, or otherwise modify the source.

Sincerely,

Paul Dubenetzky, Chief
Permits Branch
Office of Air Quality

GS

cc: File - Allen County
Allen County Health Department
Air Compliance – Jennifer Dorn
Permit Tracking - Janet Mobley
Technical Support and Modeling - Michele Boner
Compliance Data Section - Karen Nowak

Registration Annual Notification

This form should be used to comply with the notification requirements under 326 IAC 2-5.1-2(f)(3)

Company Name:	Northern Indiana Crematory Corporation
Address:	222 N.Thomas Road
City:	Fort Wayne, IN 46808
Authorized individual:	Alice M. Minnick
Phone #:	(219)-432-5031
Registration #:	003-13654-00184

I hereby certify that Northern Indiana Crematory Corporation is still in operation and is in compliance with the requirements of Registration **003-13654-00184**.

Name (typed):
Title:
Signature:
Date:

Indiana Department of Environmental Management Office of Air Quality

Technical Support Document (TSD) for a Registration

Source Background and Description

Source Name: Northern Indiana Crematory Corporation
Source Location: 222 N.Thomas Road, Fort Wayne, IN 46808
County: Allen
SIC Code: 7261
Operation Permit No.: 003-13654-00184
Permit Reviewer: Gurinder Saini

The Office of Air Quality (OAQ) has reviewed an application from Northern Indiana Crematory Corporation relating to the construction and operation of animal crematory.

Permitted Emission Units and Pollution Control Equipment

The source consists of the following permitted emission units and pollution control devices:

- (a) one (1) Therm-Tec G-50-P animal crematory unit, with a maximum capacity of 625 pounds per hour, consisting of primary and secondary chambers, exhausting to stack 1.

Unpermitted Emission Units and Pollution Control Equipment

There are no unpermitted facilities operating at this source during this review process.

Existing Approvals

This is the first air approval for this source.

Enforcement Issue

There are no enforcement actions pending.

Stack Summary

Stack ID	Operation	Height (feet)	Diameter (feet)	Flow Rate (acfm)	Temperature (°F)
#1	Incineration	34' 7"	4'	12,000	1600

Recommendation

The staff recommends to the Commissioner that the **construction and operation** be approved. This recommendation is based on the following facts and conditions:

Unless otherwise stated, information used in this review was derived from the application and additional information submitted by the applicant.

A complete application for the purposes of this review was received on December 20, 2000.

Emission Calculations

See Appendix A page 1 of 1 of this document for detailed emissions calculations

Potential To Emit of Source Before Controls

Pursuant to 326 IAC 2-1.1-1(16), Potential to Emit is defined as the maximum capacity of a stationary source or emissions unit to emit any air pollutant under its physical and operational design. Any physical or operational limitation on the capacity of a source to emit an air pollutant, including air pollution control equipment and restrictions on hours of operation or type or amount of material combusted, stored, or processed shall be treated as part of its design if the limitation is enforceable by the U. S. EPA, the department, or the appropriate local air pollution control agency.

Pollutant	Potential To Emit (tons/year)
PM	9.6
PM-10*	9.6
SO ₂	3.4
VOC	4.1
CO	13.7
NO _x	4.1

* assuming all PM to be PM-10.

- (a) The potential to emit (as defined in 326 IAC 2-7-1(29)) of pollutants are less than 25 tons per year. Therefore, the source is subject to the provisions of 326 IAC 2-5.1.
- (b) Fugitive Emissions
Since this type of operation is not one of the twenty-eight (28) listed source categories under 326 IAC 2-2 and since there are no applicable New Source Performance Standards that were in effect on August 7, 1980, the fugitive particulate matter (PM) and volatile organic compound (VOC) emissions are not counted toward determination of PSD and Emission Offset applicability.

County Attainment Status

The source is located in Allen County.

Pollutant	Status (attainment, maintenance attainment, or unclassifiable; severe, moderate, or marginal nonattainment)
PM-10	Attainment
SO ₂	Attainment
NO ₂	Attainment
Ozone	Attainment
CO	Attainment
Lead	Attainment

- (a) Volatile organic compounds (VOC) and oxides of nitrogen (NO_x) are precursors for the formation of ozone. Therefore, VOC emissions are considered when evaluating the rule applicability relating to the ozone standards. Allen County has been designated as attainment or unclassifiable for ozone. Therefore, VOC and NO_x emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2 and 40 CFR 52.21.

- (b) Allen County has been classified as attainment or unclassifiable for all criteria pollutants. Therefore, these emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2 and 40 CFR 52.21.

Source Status

New Source PSD Definition (emissions after controls, based on 8,760 hours of operation per year at rated capacity and/ or as otherwise limited):

Pollutant	Emissions (ton/yr)
PM	9.6
PM10	9.6
SO ₂	3.4
VOC	4.1
CO	13.7
NO _x	4.1
Single HAP	-
Combination HAPs	-

- (a) This new source is **not** a major stationary source because no attainment pollutant is emitted at a rate of 250 tons per year or greater and it is not in one of the 28 listed source categories. Therefore, pursuant to 326 IAC 2-2, and 40 CFR 52.21, the PSD requirements do not apply.

Part 70 Permit Determination

326 IAC 2-7 (Part 70 Permit Program)

This new source is not subject to the Part 70 Permit requirements because the potential to emit (PTE) of:

- (a) each criteria pollutant is less than 100 tons per year,
- (b) a single hazardous air pollutant (HAP) is less than 10 tons per year, and
- (c) any combination of HAPs is less than 25 tons/year.

This is the first air approval issued to this source.

Federal Rule Applicability

- (a) The incinerators are not subject to New Source Performance Standards (NSPS), 326 IAC 12 (40 CFR Part 60.50, Subpart E) because the charge capacity is 13.2 tons per day which is less than 50 tons per day, the applicability threshold. There are no other NSPS (326 IAC 12 and 40 CFR Part 60) applicable to this source.
- (b) There are no other New Source Performance Standards (NSPS)(326 IAC 12 and 40 CFR Part 60) applicable to this source.
- (b) There are no National Emission Standards for Hazardous Air Pollutants (NESHAPs)(326 IAC 14 and 40 CFR Part 63) applicable to this source.

State Rule Applicability - Entire Source

326 IAC 2-6 (Emission Reporting)

This source is located in Allen County and the potential to emit of any criteria pollutant is less than ten (10) tons per year. Therefore, 326 IAC 2-6 does not apply.

326 IAC 5-1 (Visible Emissions Limitations)

Pursuant to 326 IAC 5-1-2 (Opacity Limitations), except as provided in 326 IAC 5-1-3 (Temporary Exemptions), opacity shall meet the following, unless otherwise stated in this permit:

- (a) Opacity shall not exceed an average of forty percent (40%) any one (1) six (6) minute averaging period as determined in 326 IAC 5-1-4.
- (b) Opacity shall not exceed sixty percent (60%) for more than a cumulative total of fifteen (15) minutes (sixty (60) readings) as measured according to 40 CFR 60, Appendix A, Method 9 or fifteen (15) one (1) minute nonoverlapping integrated averages for a continuous opacity monitor in a six (6) hour period.

State Rule Applicability - Individual Facilities

326 IAC 4-2-2 (Incinerators: Requirements)

This rule applies to this incinerator operation. Pursuant to 326 IAC 4-2-2 (Incinerators: Requirements), All incinerators shall:

- I. consist of primary and secondary chambers or the equivalent;
- II. be equipped with a primary burner unless burning wood products;
- III. comply with 326 IAC 5-1 and 326 IAC 2;
- IV. be maintained properly as specified by the manufacturer and approved by the commissioner;
- V. be operated according to the manufacturer's recommendations and only burn waste approved by the commissioner;
- VI. comply with other state and/or local rules or ordinances regarding installation and operation of incinerators;
- VII. be operated so that emissions of hazardous material including, but not limited to, viable pathogenic bacteria, dangerous chemicals or gases, or noxious odors are prevented;
- VIII. not emit particulate matter in excess of three-tenths (0.3) pounds of particulate matter per one thousand (1,000) pounds of dry exhaust gas at standard conditions corrected to fifty percent (50%) excess air; and
- IX. not create a nuisance or a fire hazard.

Based on condition VIII above, allowable PM emissions are:

Allowable PM = 0.3 pounds per one thousand (1,000) pounds of dry exhaust gas at standard conditions. As stated in the permit application the Manufacturer's guaranteed particulate emission rate is 0.3 pounds particulate matter per 1000 pound dry exhaust gas corrected to 50% excess air. Therefore this operation will comply with 326 IAC 4-2-2.

326 IAC 9-1-1 (Carbon Monoxide Emission Limit)

The incinerator burns the waste gas stream in a secondary chamber, which is equipped with a secondary burner. This is equivalent to a direct flame after burner control. Therefore the incinerator complies with this rule.

Conclusion

The construction and operation of this Animal Crematory shall be subject to the conditions of the attached proposed Registration 003-13654-00184.

Appendix A: Emission Calculations
Incinerator

Company Name: Northern Indiana Crematory Corporation
Address City IN Zip: 222 N.Thomas Rd., Fort Wayne, Indiana 46808
CP: 003-13654
Plt ID: 003-00184
Reviewer: Gurinder Saini
Date: 08-Jan-01

THROUGHPUT
lbs/hr
625

THROUGHPUT
ton/yr
2737.5

Emission Factor in lb/ton	POLLUTANT				
	PM	SO2	CO	VOC	NOX
	7.0	2.5	10.0	3.0	3.0
Potential Emissions in ton/yr	9.6	3.4	13.7	4.1	4.1

Methodology

Emission factors are from AP 42 (5th Edition 1/95) Table 2.1-12, Uncontrolled emission factors for industrial/commercial refuse combustors, multiple chambers

Throughput (lb/hr) * 8760 hr/yr * ton/2000 lb = throughput (ton/yr)